ENVIRONMENTAL ASSESSMENT
FOR
BIRCH CREEK ROCK PITS
OR-030-99-32

Prepared by:
U.S. Department of the Interior
Bureau of Land Management
Malheur Resource Area
100 Oregon Street
Vale, Oregon 97918

I. INTRODUCTION

A. BACKGROUND/ PURPOSE AND NEED

The need to develop new sources of rock aggregate along the western portion of Cow Creek Road above the Owyhee River canyon rim at Birch Creek has been known for several years, especially since BLM acquired private properties on the Owyhee Wild and Scenic River at Birch Creek. Consequently, the purpose of the proposed action is to develop two rock pits in order to provide a long-term (10+ years) supply of rock aggregate near the west end of the Cow Creek Road for maintenance purposes. The pits are needed because of a lack of near-by sources of material and a need to provide safe public access along the Cow Creek-Birch Creek Ranch Road. Development of these sources would also significantly reduce the cost of maintaining the western portion of the Cow Creek Road by eliminating the need to haul material from existing BLM pits several miles to the east.

B. CONFORMANCE WITH OTHER PLANS, AGREEMENTS, LAWS AND REGULATIONS

The proposed action is consistent with the following laws, regulations and plans:

The Materials Act of 1947, as amended (30 U.S.C. 601, *et. seq.*)

This law authorizes the Secretary of the Interior to dispose of mineral materials (e.g., sand & gravel, stone, and common clay) from public lands, either through sale or, in the case of governmental entities or non-profit organizations, through the issuance of free-use permits.

The Mining and Mineral Policy Act of 1970

This law establishes the national policy of encouraging mineral development without undue hindrance.

The Federal Land Policy and Management Act of 1976

This law establishes the environmental protection requirements for the use, occupancy, and development of the public lands. Section 302 of the act directs the Secretary of the Interior to: (1) Manage the public lands under the principles of multiple use and sustained yield in accordance with approved land use plans, (2) To regulate the use, occupancy and development of the public lands, and (3) To prevent unnecessary and undue degradation of the public lands.

The 43 CFR 3600 Regulations

These regulations establish the procedures for mineral material exploration, development and disposal as well as the protection of the public lands under free use permit or sale contract.

Northern Malheur (1979)/Southern Malheur (1983) Management Framework Plans.

These plans contain the decisions and overall plans for the use of public land in Malheur County. The proposed action conforms to the multiple use intent of the plans and with objectives M-1, which calls for the retention of all public land known or suspected to contain valuable mineral or energy deposits for exploration, discovery, detailed quantity and quality determination and eventual mining; and Object M-2, which calls for the disposal of common variety materials to meet public demand.

Oregon State-wide Planning Goals (1985)

This document outlines the planning goals of the Oregon Department of Land Conservation and Development. The proposed action generally conforms with those goals, and more specifically with Goal 9-Economy of the state.

Malheur County Comprehensive Land Use Plan

This plan contains the official goals and policies of Malheur County concerning land use planning, including a policy of encouraging mineral development where it will improve the economy of the county, consistent with state, federal and environmental laws.

II. DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

Proposed Action: The proposed action is to develop two new sources of rock aggregate along the west end of the Cow Creek-Birch Creek Road, to be used as long-term sources of rock aggregate. The eastern site is located on public land and the southern portion was previously disturbed during construction of the Schnable Creek #3 Reservoir; it will be designated as a community pit. The western pit is located on "Split Estate" (Federal surface/State minerals) and will be operated under an Oregon Division of State Lands permit. Development of this site is being pursued because of resource conflicts at other BLM rock sites. The two sites are situated on the following described land (see attached location maps):

Schnable Creek #3 Reservoir Community Pit (BLM surface & minerals)
T. 28 S., R. 44 E. Section 3: Lot 4 (40.13 acres)

East Birch Creek Pit (BLM surface/State minerals)

T. 27 S., R. 43 E. Section 36: NW¼SE¼NE¼ (10 acres)

The proposed action would permit the following activities:

1. Surface extraction of approximately 50,000 cubic yards of rock aggregate and up to 10 acres of surface disturbance at each pit. Mining would involve the construction of a short (approximately 1,500 feet long) road to the State site; upgrading the existing road to the BLM pit site, including the installation of a large culvert, placed in the existing spillway of Schnable Creek #3 Reservoir; site preparation (topsoil and overburden removal and stockpiling at each pit, as necessary); drilling; blasting; crushing; screening and sizing (as necessary); loading; and hauling. Equipment would consist of a rock drill and compressor, blasting/explosives, loading/delivery equipment, road grader, dozer, crusher, screener, ten cubic yard dump trucks/belly dumps, and loaders.

1. Stockpiling reject material, if any, on each site for reclamation use.

2. Selling the mineral materials from the BLM pit at fair market value.

4. Issuing free use permits to Federal, State and local agencies from the BLM pit, subject to special operating conditions.

5. Recontouring of the pits, restoring the soil, and reseeding all disturbed areas. All reclamation would be conducted upon depletion of the deposit(s) or termination of the permit(s), in accordance with an approved mining plans and/or approved permit(s).

No Action Alternative: Under this alternative, new sources of aggregate would not be developed. Aggregate would be obtained from an existing BLM community pit (Cow Creek #2), located approximately 8 miles SSE of the eastern (Schnable Creek #3 Reservoir) pit.

Alternate Locations Considered but Eliminated: Three other sites were examined as potential rock sources/community pits — Groundhog Reservoir (T. 28 S., R. 44 E., Section 6: Lots 5 & 6); Bench Mark 4501 (T. 28 S., R. 44 E., Section 6: Lot 4); and Schnable Creek (T. 28 S., R. 44 E., Section 2: Lots 1 & 2). The Groundhog Reservoir site was eliminated as a potential source of rock due to unacceptable conflicts with cultural resources (the presence of pictographs at the proposed quarry locations), high visual sensitivity, partially due to its proximity to the Jordan Craters WSA, and unacceptable hydrologic impacts (extraction would essentially eliminate the drainage that feeds Groundhog Reservoir). Site BM 4501 was eliminated due to unacceptable conflicts with cultural resources (the presence of pictographs at the proposed quarry site) and high visual sensitivity. The Schnable Creek site was eliminated due to potential conflicts with a sagegrouse lek, high visual sensitivity, and hydrologic concerns (extraction would result in the virtual destruction of the riparian zone that borders Schnable Creek).

III. AFFECTED ENVIRONMENT

Air Quality: The proposed pits are situated in a relatively remote area with no concentrated industrial activity. Consequently, air quality is presumed to be good to except during the dry season, when dusty conditions may prevail as a result of heavy vehicle use and occasional high winds. No air quality observations in the immediate area are available.

Water Resources: The Schnable Creek Reservoir pit is located on a tributary to McCain Creek adjacent to Schnable Creek Reservoir #3. Access to the pit would have to be gained by crossing McCain Creek. The creek supports herbaceous riparian vegetation above and below the reservoir. Flow in the stream is intermittent with highest flows in response to snowmelt in the spring.

The East Birch Creek Pit is not located near any water resources.

Wildlife: The area provides habitat for many species of wildlife that require big sagebrush-steppe rangeland habitat. Typical species includes pronghorn, coyote, black-tailed jackrabbits, sagebrush voles, sage sparrows, sage thrashers, Brewers sparrows and meadow larks. Small mammals remain in the general vicinity of the proposed projects year-round. Pronghorn have large home ranges and generally would use the proposed sites for short periods during the year. Most of the birds migrate during winter, some as far south as Central America; returning in the spring to breed. Most of these neotropical migratory bird species construct nests in sagebrush, and if the sage is absent so will be that species. All wildlife utilizing the proposed sites require a mix of sagebrush, grasses and forbs for food escape cover and/or nesting sites.

Vegetation: The majority of the Schnable Creek #3 Reservoir site supports low sagebrush (*Artemisia arbuscula*), bottlebrush squirreltail (*Sitanion hystrix*)and Sandberg bluegrass (*Poa secunda*) with a complement of forbs, including biscuit root (*Lomatium cous*), milk-vetch (*Astragalus miser*), lupine (*Lupinus* sp.) and pussytoes (*Antennaria dimorpha*). Scattered crested wheatgrass (*Agropyron cristatum*) plants are found throughout the area.

The East Birch Creek site supports a generally uniform stand of bluebunch wheatgrass (*Agropyron spicatum*) and Sandberg bluegrass. Diversity of forbs is low at this site, with daisy fleabane (*Erigeron* sp.) and yampah (*Perideridia bolanderi*) the primary forbs scattered throughout the grasses.

Threatened/Endangered Species. The sole special status wildlife species in the project area is sage grouse. Leks (areas of low stature vegetation used by groups of males for courting females) are located approximately one mile east and west of the proposed Schnable Creek Pit and approximately two miles east and west of the proposed East Birch Creek Pit. The three leks are approximately 1/4 mile north or south of the County Road and are used by grouse

from March until early May. Most courtship activity occurs from ½ hour before sun up until about 0900 in the morning. Human activity and predatory animals in the vicinity of the leks will cause birds to abandon the area for several minutes to a full day, depending on the level of disturbance. Hens nest up to 10 miles from leks in sagebrush stands with 15-30% canopy cover and perennial grasses at least 7-9" tall and 3-10% basal cover. Sage grouse move their chicks to higher elevation and away from the proposed project sites as the rangeland dries during summer. This population of grouse was followed one winter by ODFW, with radioed birds traveling up to 30 miles to the west to lower elevation areas. It isn't known if birds make similar, long-distance moves each winter.

No special status, threatened or endangered plant species were found at either project site.

Weeds: Scotch thistle (*Onopordum acanthum*) and bull thistle (*Circium arvense*), aggressive biennials, are present on small scattered sites in the general area. A fairly large infestation of Scotch thistle is established within 2 miles of the East Birch Creek Pit, near Blowout Reservoir.

A few sites of whitetop (*Cardaria draba*), an invasive, long-lived perennial, are also in the general area as well as patches of medusahead, an aggressive annual grass.

***Lands & Realty*:** The East Birch Creek site is located on reconveyed surface estate (OR-04727); the mineral estate was not reconveyed, and is administered by the Oregon Division of State Lands. The Schnable Creek #3 Reservoir site is located on public land; the surface and mineral estates are owned by the United States. No land use authorizations of record are contained within either of these sites. No conflicting land uses are proposed or planned for these areas.

***Topography*:** Both proposed pits are located on gently undulating terrain that slopes to the southwest. The East Birch Creek site is situated in a small swale and, therefore, is partially hidden from the Cow Creek-Birch Creek Ranch road which passes about 500 feet to the southwest. Local relief is approximately 30 feet, ranging from a high of about 4,660 feet in the northwest corner of the site, to a low of some 4,630 feet in its southeast corner. The Schnable Creek #3 Reservoir site is situated astride McCain Creek, which drains the southwest portion of the site, just north of the Cow Creek-Birch Creek Ranch Road. Local relief is slightly greater than the East Birch Creek site, being approximately 50 feet, ranging from a high of some 4,685 feet in the northeast corner of the site, to a low of some 4,635 feet in its southwest corner.

Soils: Detailed information about the soils in the area is not available. On a general scale, soils in the area are very shallow and rocky. Most of the soils fall into the soil order of Aridisols

which

indicates soil development under dry climatic conditions. The soils at the Schnable Creek Reservoir pit are slightly deeper than those at the East Birch Creek pit. In the southern portion of the proposed reservoir pit site, much of the soil was removed during construction of Schnable Creek Reservoir #3

Geology: Surficial geologic material found at the East Birch Creek pit consists largely of fined-grained Pleistocene-Pliocene, olivine-rich plateau basalt flows up to 400 feet thick; much of the material is overlain by a thin (<10 feet thick) mantle of wind-blown silt. The Schnable Creek #3 Reservoir pit consists largely of coarse-grained, middle Miocene rhyolitic ash flow tuff, perhaps 300 feet thick, overlain by a thin cover (±10 feet) of poorly consolidated Holocene terrace gravels, probably derived from the rhyolite.

Recreation: For both proposed pit locations, recreation pursuits consist of dispersed, undeveloped types of activities, primarily general sightseeing from the existing Birch Creek Road and hunting and day hiking. The Birch Creek Road is the primary access

route for visitors to the Jordan Craters area and the sole access route to the BLM administered Birch Creek Historic Ranch on the Owyhee National Wild River.

***Visual Resources*:** The key observation point for casual observers for both pits is from the Birch Creek Road. The scenic quality of the landscape setting of both pits is relatively low; however, both pits are in the visual foreground corridor of the Birch Creek Road (a road which serves as an important primary route for various destinations in the surrounding area), which, respectively, elevates the visual sensitivity level of the road's corridor. Combined, these 3 factors define the visual resource management (VRM) class III for the setting. The proposed Schnable Creek #3 Reservoir pit and its access road would be directly adjacent to the existing reservoir and within 300 feet of the Birch Creek Road on a low-profiled slope that remains predominately void of vegetation due to mechanical disturbance which occurred during the reservoir's development. The proposed East Birch Creek pit, although in the visual foreground of the Birch Creek Road, would rest in a topographic location hidden from view of road travelers.

***Wilderness*:** The northeast boundary of the Jordan Craters Wilderness Study Area (WSA) is within 600 feet of the proposed East Birch Creek pit. At this location, the Birch Creek Road

serves as the north boundary of the WSA. The proposed Schnable Creek Reservoir pit is approximately 3 miles east of the northeast corner of the WSA.

Areas of Critical Environmental Concern: Neither project site is located within an area of critical environmental concern (ACEC). However, the proposed East Birch Creek pit is less than a mile from the Jordan Craters ACEC/Research Natural Area (RNA) and the proposed Schnable Creek #3 Reservoir pit is about 3 miles from the ACEC/RNA. The ACEC/RNA was established to protect and enhance historic, cultural and scenic values, as well as values for wildlife habitat, rare plants, terrestrial and riparian plant communities, and significant geologic features.

***Cultural Resources*:** The Native people of the Great Basin practiced their ancestral lifeway into the 19th century, and were heirs to an extremely ancient cultural tradition. Their technology was effective and efficient, utilizing multi-functional, light-weight and expendable tools. Gathering activities are attested to by digging sticks, carrying baskets, milling stones. Hunting activities a are represented by the atlatl and dart, bow and arrow, stone projectile points, stone knives and scrapers. Cultural resources associated with the prehistoric use in this area consists of rock art, rock shelters, rock structures, habitation sites along the river, small camps, lithic procurement areas, flaking stations with good vantage and scared sites. Rock art is representative of the Great Basin curvilinear style of circles and wavy lines and later representational styles which show single panels of individual recognizable forms: antelope, lizard, bighorn sheep and deer.

Paleontological Resources: Fossil flora and fauna are associated with lacustrine sediments and sedimentary rocks. The volcanic processes active in this area of the Owyhee Uplands are not conducive to the preservation of fossil remains and are not known to occur in this location.

***Native American Concerns*:** The Owyhee River, tributary canyons and adjacent uplands are known to have been intensively and extensively utilized by Native Americans. Traditionally used resources include edible roots such as biscuitroot, camas and onion, goosefoot, Indian ricegrass, and Great Basin wildrye seeds; willow, quaking aspen posts for hide working; basketry grasses, chokecherries, currants; mountain mahogany; and obsidian, basalt and cryptocrystalline silicate toolstone sources.

***Other Mandatory Elements*:** The following mandatory elements are either not present or would not be affected by the proposed action:

Prime and Unique Farmlands
Wetlands/Flood plains
Wild & Scenic Rivers
Fisheries
Livestock Grazing

Hazardous/Solid Wastes

IV. ENVIRONMENTAL CONSEQUENCES AND PROPOSED MITIGATION

A. Proposed Action

Air Quality: During operating periods air quality in the area of the pits would be slightly degraded as a result of the generation of dust and other particulate matter. However, due to the small size and intermittent nature of the operations, impacts are expected to be small and localized and should not appreciably affect the surrounding area.

Water Resources: Crossing McCain Creek to remove materials from the Schnable Creek Reservoir pit would disturb part of the channel and create some sediment input to the stream. The herbaceous riparian vegetation would be destroyed at the point of the crossing, but the surrounding vegetation would provide a seed source along with reclamation after the pit is not in use. Activity in this pit, due to its proximity to the creek, would also contribute to the degradation of the water quality. This would affect McCain Creek downstream from the reservoir.

Wildlife & Fisheries: Developing the two pits would eliminate the habitat required by all wildlife currently utilizing the two sites. Wildlife require vegetation for breeding sites, escape cover and food. Small mammals species with small home ranges, such as sagebrush voles probably would loose the habitat currently supporting several individuals. Most other wildlife species have home ranges that cover several acres and these may: 1.) lose breeding pair(s), 2.) may have less habitat available within their home range thereby reducing their reproductive capacity, or 3.) may be able to compensate by spending time in a seldom used portion of an adjoining pairs territory. Large species, such as pronghorn have large annual ranges and impacts probably would be unmeasurable. The increased human activity, use of large equipment and explosives would disturb wildlife in sage-steppe rangeland adjacent to the proposed pits, reducing the habitat quality beyond the project boundary during the spring and summer breeding season. As the quality of the road is improved it is likely the public would be able to access the area earlier in the spring and to travel faster on the county road. This would increase the risk of vehicles killing animals on the roadway

Vegetation: All vegetation would be destroyed and removed from the both extraction sites. There would be both short and long term impacts due to the continuing disturbance caused by rock extraction over a period of years. However, due to the small size of the sites relative to the generally undisturbed landscape setting, no significant impacts would be anticipated to the overall plant communities represented by the vegetation at either site. Rehabilitation of the basalt site with native species and of the rhyolite site with native

and desirable non-native species would further reduce long term impacts.

Threatened/Endangered Species: The proposed gravel pits are located sufficiently far from the sage grouse leks to create little direct disturbance to courting birds from material extraction. However, most material extraction would likely occur during spring, when the leks would be occupied. Road maintenance activity during the early morning hours could result in a slight increase in disturbance to birds on leks. It is unlikely that grouse use the proposed project locations for nesting due to their close proximity to the existing County road. As the quality of the road is improved it is likely that the public would be able to access the area earlier in the spring and travel faster on the county road

This activity may cause a slightly increased risk of road kills and rate of disturbance to birds on leks by the public.

Weeds: Although no noxious weeds have been reported on the two rock sites, soil disturbance associated with mining operations would create optimum conditions for establishment of noxious weeds, especially with the use of heavy equipment -- haul trucks and processing equipment (e.g., crushers and screeners). Once established, the weed seeds could then be spread off-site with the mineral material; consequently, every effort should be made to avoid introduction of noxious weeds to the site.

***Topography*:** Approximately 4 acres have already been disturbed at the Schnable Creek #3 Reservoir site as a result of the construction of the reservoir. Development of the proposed pits would result in the permanent alternation of the topography on approximately 10 acres/site (in the shape of a small depression at each pit). Reshaping would blend the pits into the surrounding terrain to a certain extent, but slight depressions would still remain

Soils: The soil cover on approximately 4 acres at the Schnable Creek #3 Reservoir site has already been removed, undoubtedly resulting in some soil mixing and/or loss. However, the overall impact to soils has been minimal. The proposed mineral extraction activities would result an additional disturbance of up to 20 acres (10 acres at each site), causing some localized soil displacement. However, in so far as the soil would be stripped and stockpiled, then subsequently used for reclamation and recontouring of the disturbed surfaces at both gravel pits, the resulting impacts would be minimal.

Geology: Extraction of rock material from the two pits would result in the permanent removal of some 100,000 cubic yards of rock material (50,000 cubic yards/site). which would result in a small depletion of this non-renewable resource. However, overall impacts would be minor, as there are several hundred thousand, if not millions of yards of rock available at each site.

Lands & Realty: Implementation of the proposed action would render the land occupied by the pit(s) unavailable for land uses not compatible with a surface mining operation.

Recreation: There are no anticipated adverse impacts for the recreating public. Precautions used during periods of using explosives at the pit sites would provide adequate safety for travelers along Birch Creek Road.

Visual Resources: The proposed Schnable Creek Reservoir pit site and its access road would be within 300 feet of the key observation point of casual observers, which is from a traveling automobile on the Birch Creek Road. It would be visually apparent when traveling from either direction, for up to approximately 2 miles when traveling east and about a half

mile when traveling west. The only time the proposed East Birch Creek pit site would be temporarily observable would be while traveling the Birch Creek Road by westbound travelers for less than a quarter mile from a distant background point located about 3 miles east of the proposed pit.. This pit's short access road would be apparent only for a brief distance as Birch Creek Road travelers approach its junction. Results of a contrast rating indicates the Schnable Creek Reservoir pit, when in development, would exceed criteria for a VRM class III location. However, the visual impact of the pit is very site-specific, with the visual resource management objective for this VRM class III corridor not jeopardized. Reclamation and other mitigative actions of the pit would further reduce the long term impacts. Overall, visual impacts are considered insignificant, and substantially mitigated in the long term. .

Wilderness: Wilderness values associated with the Jordan Craters WSA would not be affected by the proposed action. Due to their specific site locations, aided by topographic elevation changes, neither proposed pit would be visible from within the Jordan Craters WSA. Certain wind conditions may be able to carry infrequent low levels of motorized vehicle noise originating from the East Birch Creek pit which may be heard from the northern-most edge of the WSA boundary area. Such audible impacts would be circumstantial, insignificant and virtually no different in level or scale than that of passing traffic along the Birch Creek Road.

Areas of Critical Environmental Concern: No direct or indirect impacts would occur to the nearby Jordan Craters ACEC/RNA as a result of mining operations at the two rock sites.

Cultural Resources: The Owyhee River, tributary canyons and adjacent uplands are known to have been intensively and extensively utilized by Native Americans. A Class

III cultural resource inventory of both pit locations was conducted in April, 1999. No prehistoric or historic properties were located. The rimrock and basalt outcrops where rock art panels are known would not be disturbed by this project. The location of the East Birch Creek pit while adjacent to the road, is located on the side of a low swale. This location would maintain the integrity of the setting and surrounding aesthetics associated with the rock art sites. With the exception of the county road construction, the landscape has changed little since Native Americans utilized the Owyhee upland country.

***Paleontological Resources*:** No fossil flora or fauna localities were located during the survey of these pit locations. The nearest fossil locality is at Cow Lakes where the sediments are lacustrine rather than volcanic.

***Native American Concerns*:** At present, there are no known sacred sites in this area, however there may be sacred sites, significant landforms and traditional use areas of which

BLM is unaware. The preservation of the integrity and aesthetics of the natural setting surrounding known sites would serve as some protection to this area of the Owyhee Uplands.

B. No Action Alternative

Environmental impacts resulting from this alternative would be the same as those currently occurring, namely: vehicular traffic and associated dust generation. However, the additional haul distance from the Cow Creek #2 community pit to the west end project area (approximately 8 miles more than the haul distance from the proposed Schnable Creek #3 Reservoir site, or some 17 miles overall, one way), would result in an increased operating cost of approximately 30%, or $1.37/cubic yard. In addition, the material at the Cow Creek #2 community pit is of lower quality and requires a greater volume of material for the road. Consequently, the additional costs incurred by implementing this alternative would severely limit BLM's ability to adequately maintain the Cow Creek-Birch Creek Ranch Road, making it economically unviable.

C. Proposed Mitigation Measures

In order to protect other resources which may be affected by implementation of the proposed action, the following mitigation measures/stipulations will be applied:

1. Surface disturbing activities will be confined to the minimum acreage necessary to satisfy needs for rock aggregate. No surface

disturbance will be authorized south of Schnable Creek #3 Reservoir.

2. Vertical cut slopes in the pit(s) will not exceed 20 feet in height.

3. Mining and processing equipment will be used only as needed; no long-term storage on-site will be authorized..

4. In order to keep stream and water quality degradation to Schnable Creek #3 Reservoir and McCain Creek to a minimum, vehicle access to the pit site will be limited to the existing BLM road, located above (to the west) of the reservoir and the access road to be constructed for the East Birch Creek Pit Site
5. Surface disturbing activities will cease during periods of wet weather, soft or muddy road conditions, or high fire danger.

6. If archaeological or paleontological material is uncovered during operations, ground-disturbing activities must stop and the authorized officer notified immediately. The material shall remain intact until an examination of the material is completed by an archaeologist acceptable to the authorized officer, including, but not limited to, archaeological salvage or other measures to protect and preserve the materials.

7. All non-BLM contractor's construction equipment, e.g., rock crushing and processing equipment, and vehicles used by employees of non-BLM construction company(s) will be thoroughly cleaned before going onto BLM lands, especially if the contractor/ workers are out-of-area. To prevent invasion of the sites by noxious weeds and thereby introducing noxious weeds onto BLM's road network, the sites will be monitored annually and the best treatment practices applied, if necessary.

8. Upon completion of operations, all disturbed areas will be reshaped to conform as much as possible to the natural terrain, stockpiled topsoil
spread evenly over the reshaped area, and broadcast seeded with the following mixture of pure live seed, certified as noxious weed-free. If the seed is drilled, then application rates may be reduced by 50%

Secor" bluebunch wheatgrass	4 lbs./acre
bottlebrush squirreltail	1 lb./acre
Wyoming big sagebrush	1 lb./acre
"Topar" pubescent wheatgrass	8 lbs./acre
"Covar" sheep fescue	1 lb./acre

D. Cumulative Impacts

While the proposed action would result in the permanent removal of some 100,000 cubic yards of rock material, the cumulative impact to the mineral resource is insignificant compared to the ultimate resource of perhaps one million cubic yards at each site, and the several hundred million cubic yards of mineral material estimated to exist in the surrounding area.

At present, there are 50 designated community pits in Malheur County, aggregating some 1905 acres, or approximately 0.04% of the 6.4 million acres administered by BLM in the county. Developing two new sources of mineral material will have a minimal cumulative impact on the land.

V. RELATIONSHIP BETWEEN SHORT-TERM USE TO LONG-TERM PRODUCTIVITY

For wildlife and special status species there will be a increasing impact to habitat as increasing area is disturbed. While the habitat loss will extend to the long-term, wildlife may habituate to the presence of human activities at the pits, partially mitigating impacts to wildlife residing in surrounding, uncleared rangeland. Due to the relatively small size of the areas disturbed by the pits, impacts to long-term productivity are not expected to be significant.

VI. COMMITMENT OF RESOURCES

The commitment of resources will extend for the life of the pits. Reclamation; including reshaping topsoil and reseeding will allow the disturbed areas to approximate the surrounding landscape. Mineral material taken from the sites will be lost and committed to other uses.

VII. CONSULTATION AND COORDINATION

A. Individuals and Agencies Consulted

Perry Lumley, Oregon Division of State Lands (ODSL)

B, Participating members

Name	Position
Bob Alward	Recreation Planner
Al Bammann	Wildlife Biologist
Dave Evans	Engineering Equipment Operating Supervisor
Jean Findley	Botanist
Bill Holsheimer	Geologist, Team Leader
Diane Pritchard	Archaeologist
Shaney Rockefeller	Hydrologist/Soil Scientist
Cynthia Tait	Fishery Biologist

C. Public Interest: None expressed

FINDING OF NO SIGNIFICANT IMPACT

I have reviewed this environmental assessment, including the explanation and resolution of any potentially significant impacts. I have determined that the proposed action with the mitigation measures described below will not have any significant impacts on the human environment and that an EIS is not required. I have determined that the proposed action is in conformance with the approved land use plan.

S/Roy L. Masinton *09/09/99*
Authorized Official: Date
Field Manager, Malheur Resource Area

DECISION RECORD

It is my decision to implement the project as described in EA OR-030-99-32 with the mitigation measure identified below:

Mitigation measures/Remarks

1. Surface disturbing activities will be confined to the minimum acreage necessary to satisfy needs for rock aggregate. No surface disturbance will be authorized south of Schnable Creek #3 Reservoir.

2. Vertical cut slopes in the pit(s) will not exceed 20 feet in height.

3. Mining and processing equipment will be used only as needed; no long-term storage on-site will be authorized.

4. In order to keep stream and water quality degradation to Schnable Creek #3 Reservoir and McCain Creek to a minimum, vehicle access to the pit site will be limited to the existing BLM road, located above (to the west) of the reservoir and the access road to be constructed for the East Birch Creek Pit Site

5. Surface disturbing activities will cease during periods of wet weather, soft or muddy road conditions, or high fire danger.

6. If archaeological or paleontological material is uncovered during operations, ground-disturbing activities must stop and the authorized officer notified immediately. The material shall remain intact until an examination of the material is completed by an archaeologist acceptable to the authorized officer, including, but not limited to, archaeological salvage or other measures to protect and preserve the materials.

7. All non-BLM contractor's construction equipment, e.g., rock crushing and processing equipment, and vehicles used by employees of non-BLM construction company(s) will be thoroughly cleaned before going onto BLM lands, especially if the contractor/ workers are out-of-area. To prevent invasion of the sites by noxious weeds and thereby introducing noxious weeds onto BLM's road network, the sites will be monitored annually and the best treatment practices applied, if necessary.

8. Upon completion of operations, all disturbed areas will be reshaped to conform as much as possible to the natural terrain, stockpiled topsoil spread evenly over the reshaped area, and broadcast seeded with the following mixture of pure live seed, certified as noxious weed-free. If the seed is drilled, then application rates may be reduced by 50%

Secor" bluebunch wheatgrass	4 lbs./acre
bottlebrush squirreltail	1 lb./acre
Wyoming big sagebrush	1 lb./acre
"Topar" pubescent wheatgrass	8 lbs./acre
"Covar" sheep fescue	1 lb./acre

S/Roy L. Masinton *10/04/99*

Authorized Official: Date
Field Manager, Malheur Resource Area